

A1
1. (Amended) A lead-free solder paste including a plurality of different types of metal powder mixed with a flux, one of the metal powders being a Sn alloy powder, another of the metal powders being selected from a Sn alloy powder, elemental Ag powder, elemental Cu powder, and elemental Sn powder, each Sn alloy powder including 0 - 8 mass % of Ag, 0 - 5 mass % of Cu, and at least 80 mass % of Sn, the plurality of metal powders having a composition when melted of 1 - 5 mass % Ag, at least 0.5 and less than 3 mass % Cu, and a remainder of Sn.

A2
3. (Amended) A lead-free solder paste including a plurality of different types of metal powder mixed with a flux, one of the metal powders being a Sn alloy powder, another of the metal powders being selected from a Sn alloy powder, elemental Ag powder, elemental Cu powder, and elemental Sn powder, wherein the plurality of metal powders include two Sn alloy powders, each Sn alloy powder including 0 - 8 mass % of Ag, 0 - 5 mass % of Cu, and at least 80 mass % of Sn, the plurality of metal powders having a composition when melted of 1 - 5 mass % Ag, 0.5 - 3 mass % Cu, and a remainder of Sn.

A3
5. (Amended) A solder paste as claimed in claim 3 wherein the plurality of metal powders include two different Sn-Ag-Cu alloy powders.

6. (Amended) A solder paste as claimed in claim 3 wherein one of the metal powders is a Sn-Ag alloy powder and another of

the metal powders is a Sn-Cu alloy powder.

A3 7. (Amended) A solder paste as claimed in claim 3 wherein the plurality of metal powders include a Sn-Ag alloy powder, a Sn-Cu alloy powder, and a Sn-Ag-Cu alloy powder.

8. (Amended) A method of soldering a surface mounted device comprising performing reflow soldering using the solder paste of claim 3.

Please add the following claims:

A4 13. (New) A solder paste as claimed in claim 1 wherein the plurality of metal powders have a composition when melted containing at most 1.0 mass % of Cu.

14. (New) A solder paste as claimed in claim 3 wherein the plurality of metal powders have a composition when melted containing less than 3.0 mass % of Cu.

15. (New) A solder paste as claimed in claim 3 wherein the plurality of metal powders have a composition when melted containing at most 1.0 mass % of Cu.

16. (New) A method as claimed in claim 8 including melting the plurality of metal powders in the solder paste during the reflow soldering.

17. (New) A method of soldering a surface mounted device comprising performing reflow soldering using the solder paste of claim 1, the reflow soldering including melting the plurality of metal powders in the solder paste.

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18. (New) A method of soldering comprising applying to a substrate a solder paste including a plurality of different types of metal powder mixed with a flux, one of the metal powders being a Sn alloy powder, another of the metal powders being selected from a Sn alloy powder, elemental Ag powder, elemental Cu powder, and elemental Sn powder, each Sn alloy powder including 0 - 8 mass % of Ag, 0 - 5 mass % of Cu, and at least 80 mass % of Sn, and heating the solder paste to melt the plurality of metal powders, the plurality of metal powders having a composition when melted of 1 - 5 mass % Ag, 0.5 - 3 mass % Cu, and a remainder of Sn.

REMARKS

In response to the Official Action mailed on November 2, 2001, the application has been amended. No new matter has been added. Reconsideration of the rejections of the claims is respectfully requested in view of the above amendments and the following remarks.

In the amendment of the claims, claim 3 has been rewritten as an independent claim incorporating all the features of original claim 1 from which it depended, so it remains unchanged